

We claim:

1. An isolated polynucleotide comprising a sequence selected from the group consisting of: SEQ ID NO: 1-80.
2. An isolated polynucleotide comprising a sequence selected from the group consisting of:
 - (a) complements of SEQ ID NO: 1-80;
 - (b) reverse complements of SEQ ID NO: 1-80; and
 - (c) reverse sequences of SEQ ID NO: 1-80.
3. An isolated polynucleotide comprising a sequence selected from the group consisting of:
 - (a) sequences having at least 75%, identity to a sequence of SEQ ID NO: 1-80;
 - (b) sequences having at least 90% identity to a sequence of SEQ ID NO: 1-80; and
 - (c) sequences having at least 95% identity to a sequence of SEQ ID NO: 1-80,
wherein the polynucleotide encodes a polypeptide having substantially the same functional properties as a polypeptide encoded by SEQ ID NO: 1-80.
4. An isolated polynucleotide comprising a sequence selected from the group consisting of:
 - (a) nucleotide sequences that are 200-mers of a sequence recited in SEQ ID NO: 1-80;
 - (b) nucleotide sequences that are 100-mers of a sequence recited in SEQ ID NO: 1-80;
 - (c) nucleotide sequences that are 40-mers of a sequence recited in SEQ ID NO: 1-80; and
 - (d) nucleotide sequences that are 20-mers of a sequence recited in SEQ ID NO: 1-80;
5. An isolated oligonucleotide probe or primer comprising at least 10 contiguous residues complementary to 10 contiguous residues of a nucleotide sequence recited in any one of claims 1-3.

6. A kit comprising a plurality of oligonucleotide probes or primers of claim 5.
7. A genetic construct comprising a polynucleotide of any one of claims 1-3.
8. A transgenic host cell comprising a genetic construct according to claim 7.
9. A genetic construct comprising, in the 5'-3' direction:
 - (a) a gene promoter sequence; and
 - (b) a polynucleotide sequence comprising at least one of the following: (1) a polynucleotide coding for at least a functional portion of a polypeptide of SEQ ID NO: 81-183; and (2) a polynucleotide comprising a non-coding region of a polynucleotide of any one of claims 1-3.
10. The genetic construct of claim 9, wherein the polynucleotide is in a sense orientation.
11. The genetic construct of claim 9, wherein the polynucleotide is in an anti-sense orientation.
12. The genetic construct of claim 9, wherein the gene promoter sequence is functional in a prokaryote or eukaryote.
13. A transgenic host cell comprising a construct of claim 9.
14. A transgenic organism comprising a transgenic host cell according to claim 13, or progeny thereof.
15. The transgenic organism of claim 15, wherein the organism is selected from the group consisting of *Lactobacillus* species.

16. A method for modulating the activity of a polypeptide in an organism, comprising stably incorporating into the genome of the organism a polynucleotide of any one of claims 1-3.

17. The method of claim 16, wherein the organism is a microbe.

18. An isolated polypeptide comprising an amino acid sequence selected from the group consisting of: sequences recited in SEQ ID NO: 81-183.

19. An isolated polypeptide comprising an amino acid sequence selected from the group consisting of:

- (a) sequences having at least 75% identity to a sequence of SEQ ID NO: 81-183;
- (b) sequences having at least 90% identity to a sequence of SEQ ID NO: 81-183; and
- (c) sequences having at least 95% identity to a sequence of SEQ ID NO: 81-183,

wherein the polypeptide has substantially the same functional properties as a polypeptide of SEQ ID NO: 81-183.

20. An isolated polynucleotide that encodes a polypeptide of any one of claims 18 and 19.

21. An isolated polypeptide encoded by a polynucleotide of any one of claims 1-3.

22. A fusion protein comprising at least one polypeptide according to any one of claims 18 and 19.

23. A composition comprising a polypeptide according to any one of claims 18 and 19 and at least one component selected from the group consisting of: physiologically acceptable carriers and immunostimulants.

24. A composition comprising a polynucleotide according to any one of claims 1-3 and at least one component selected from the group consisting of: physiologically acceptable carriers and immunostimulants.

25. A method for treating a disorder in a mammal, comprising administering a composition according to claim 24.

26. A method for treating a disorder in a mammal, comprising administering a composition according to claim 25.